

Work Order ID 137143

137143

Page 1

Thursday, September 24, 2015 2:10:28 PM

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 9/23/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 9/23/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: SEP 25 2015 Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4464	H								

100 Weld per dwg A/R Aluminum rod Batch: B137102 0.00

100

Large Fab Memo 0.05
 Large Fab 1- Weld D4023-3 cap as per dwg D4464

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00

110

QC Memo 0.00
 Quality Control

112 0.00

112

Small Fab Memo 0.02
 Small Fab 1- Wet install baffles to front and back panel using rivet and Proseal as per dwg
 A/R Proseal Batch:

1x CC 16-3-16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

114

QC5- Inspect part completeness to step on W/O

0.00

114

QC

Memo

0.00

Quality Control

DQA: _____ Date: _____



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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

Weld per dwg A/R Aluminum rod Batch: _____ 0.00

120

Large Fab

Memo

0.04

Large Fab

1- Weld D4001-1 and D4000-5 onto D4463-1 Top

2- Weld D3999-041/-043 doubler, ensure doubler and angle holes line-up for D4000-047

Transfer drill and c/sink D4975-1 bracket to bottom bracket , wet install as per dwg

Proseal 890B Batch: _____

3- Weld D4000-043 and D4000-045 on tank as per dwg.

4- Instal D4000-9 grommets as per dwg, Weld D4463-3 aft end as per dwg, locate D4000-1 and wet install with rivets as per dwg. ***D4000-1 FLAT SURFACE MUST BE INSTALL UPWARDS AS PER DWG***

Proseal 890B Batch: _____

5- Install hinge wet with proseal as per dwg
A/R Proseal 890B Batch: _____

6-Weld D4463-7 fwd end

PURGE INSIDE OF TANK

7-Weld top D4463-1 using DT9811 and DT9810

DQA: _____ Date: _____



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Quality Control

DQA: _____ Date: _____



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Thursday, September 24, 2015 2:10:28 PM

Item ID: D4464-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Fuel Tank Assembly

Stop *NS2*

Start Date: 9/23/15 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 9/23/15 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150

Chemical Conversion Coat per QSI005 4.1

0.00

150

HandFinish

Memo

0.02

Hand Finishing

1- Alodine on tank. No alodine inside

160

QC7-Inspect Chemical Conversion Coat

0.00

160

QC

Memo

0.00

Quality Control

164

0.00

164

Small Fab

Memo

0.02

Small Fab

1- Brush Proseal 890A on all internal sheet metal folds
Proseal 8990A Batch: _____

2- Assemble as per dwg and for D4577-041/-3/-5 access panels install wet with proseal 890B

A/R Proseal 890B Batch:

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Work Order ID 137143

137143

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Item ID: D4464-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/23/15

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

169

QC5- Inspect part completeness to step on W/O

0.00

169

QC

Memo

0.00

Quality Control

170

0.00

170

SprayPaint

Memo

0.02

Spray Painting

MASK PROIOR PRIME AND PAINT AS PER DWG

PRIME TEMPO GREY AS PER DWG AND QSI
PRIMER BATCH: _____PAINT FLAT GREY AS PER DWG AND QSI
PAINT BATCH: _____

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
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Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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OTHER : ☐																									

Picklist Print

Page 1

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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.11.23 NEW ISSUE DD VERF:EC IPP REV:B
12.03.08 AS PER DWG REV.B DD VERF:EC IPP REV:C 12.04.24
ECN 12-571 DD VERF:EC IPP REV:D 13.10.30 DWG
REV PE1 DD VERF:JLM IPP REV:E 14.06.13 AS PER DWG
REV.E DD VERF:JLM IPP REV:F 14.07.21 AS PER DWG REV.F DD
VERF:JLM IPP REV:G 15.01.15 AS PER DWG REV.G DD
VERF:JLM IPP REV:H 15.03.04 AS PER DWG REV.H9 DD
VERF:JLM IPP REV:I 15.06-17 AS PER DWG REV.H DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MS20470AD4-6

Purchased

No

Each

2,017.000

8

MS20470AD4-6

RIVET

Location	Loc Qty	Loc Code
CCK004	502	
m131618	502	
ST260a	1515	
m133077	1515	

D3997-5

Manufactured

No

190

Each

37.0000

2

2

D3997-5

Placard

Location	Loc Qty	Loc Code
ST076	37	
72611	37	

D3997-11

Manufactured

No

190

Each

22.0000

1

1

D3997-11

Placard

Location	Loc Qty	Loc Code
ST077A	22	
106884	5	
107679	5	
127110	12	

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

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Picklist Print

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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D3997-17	Manufactured	No	190	Each	20.0000	1	1
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D3997-17

Placard

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST077A	20	_____
107632	9	_____
129866	11	_____

D3997-29	Manufactured	No	190	Each	12.0000	1	1
----------	--------------	----	-----	------	---------	---	---

D3997-29

Placard

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST077A	12	_____
127111	12	_____

D3997-43	Manufactured	No	190	Each	23.0000	1	1
----------	--------------	----	-----	------	---------	---	---

D3997-43

Placard

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST077A	23	_____
106642	2	_____
107558	9	_____
127112	12	_____

D3999-7	Manufactured	No	120	Each	9.0000	1	1
---------	--------------	----	-----	------	--------	---	---

D3999-7

****B130069 → 1**

DAS
43
9-89

MAY 04 2016

Corner

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA003	9	_____
108621	4	_____
123147	1	_____
130069	4	_____

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4000-1 Manufactured No 120 Each 9.0000 1 1

D4000-1

Fuel Supply Fitting

Location	Loc Qty	Loc Code
GA	9	
128349	1	
128899	8	

D4000-5 Manufactured No 120 Each 13.0000 1 1

D4000-5

Fuel Tank Vent Fitting

B130055 → 1

DAS
43
9-89

MAY 04 2016

Location	Loc Qty	Loc Code
WA003	13	
106917	2	
107388	6	
130055	5	

D4000-9 Manufactured No 120 Each 23.0000 3 3

D4000-9

Grommet

Location	Loc Qty	Loc Code
GA	23	
106808	9	
123024	14	

D4000-045 Manufactured No 120 Each 3.0000 1 1

D4000-045

Fuel Pickup Fitting Assembly

Location	Loc Qty	Loc Code
WA003	3	
122673	3	

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Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Picklist Print

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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4008-11 Manufactured No

120 Each 13.0000 1 1

D4008-11

Hinge Half

Location

Loc Qty

Loc Code

GA
129867
WA003
122600

12
12
1
1

190 Each 6.0000 1 1

D4008-041 Manufactured No

D4008-041

Fuel Filler Splash Guard Assembly

Location

Loc Qty

Loc Code

ST243
128582
ST249
130040

4
4
2
2

190 Each 11.0000 1 1

D4023-3 Manufactured No

D4023-3

**** B81898 → 1**

DAS
43
9-89

MAY 04 2016

Cap And Flange

Location

Loc Qty

Loc Code

WA003
106700
120208
122537
129761
130907
132479

11
2
2
3
1
1
2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Picklist Print

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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4025-5 Manufactured No 190 Each 13.0000 1 1

D4025-5

Fuel Quantity Sender

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST232B	13	
106832	2	
127571	3	
129924	4	
132650	4	

D4057-1 Manufactured No 120 Each 49.0000 3 3

D4057-1

Retaining Ring

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA003	49	
106766	2	
107269	47	

D4062-041 Manufactured No 190 Each 6.0000 1 1

D4062-041

Tank Support Assembly

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
prelim	2	
128383	2	
WA003	4	
134301	4	

D4125-1 Manufactured No 120 Each 6.0000 1 1

D4125-1

Fwd Sediment Bowl

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA003	6	
130323	2	
133944	4	

DAS 43 9-89
****B130323 → 1**
MAY 04 2016

Thursday, September 24, 2015 2:10:27 PM

Shop Packet Print

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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OTHER : ☐																																																															

Picklist Print

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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4125-3 Manufactured No

120 Each 5.0000 1 1

D4125-3

Aft Sediment Bowl

****B130324→1** DAS **43** MAY 04 2016
9-89

Location Loc Qty Loc Code

WA003

5

130324

5

D4404-5 Manufactured No

120 Each 17.0000 2 2

D4404-5

Cushion, Fwd

Location Loc Qty Loc Code

ST517

17

127570

5

129922

2

133965

10

D4462-1 Manufactured No

112 Each 1.0000 1 1

D4462-1

Baffle

****B134946→1** DAS **43** MAY 04 2016
9-89

Location Loc Qty Loc Code

WA003

1

129984

1

D4462-3 Manufactured No

112 Each 2.0000 1 1

D4462-3

Baffle

****B130041→1** DAS **43** MAY 04 2016
9-89

Location Loc Qty Loc Code

WA003

2

130041

2

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Thursday, September 24, 2015 2:10:27 PM

Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4463-041

Manufactured No

120

Each

6.0000

1 1

DAS

D4463-041

Tank Top Assembly

****B134994 → 1** **43** **MAY 04 2016**
9-89

Location

Loc Qty

Loc Code

WA003

6

127344

1

134994

5

D4463-3

Manufactured No

120

Each

5.0000

1 1

DAS

D4463-3

Tank Aft End

****B130066 → 1** **43** **MAY 04 2016**
9-89

Location

Loc Qty

Loc Code

WA003

5

123531

2

130066

3

D4463-5

Manufactured No

120

Each

20.0000

1 1

DAS

D4463-5

Tank Upper Cut Out

****B121024 → 1** **43** **MAY 04 2016**
9-89

Location

Loc Qty

Loc Code

WA003

20

106751

14

121024

6

D4463-7

Manufactured No

120

Each

4.0000

1 1

DAS

D4463-7

Tank Fwd End

****B121172 → 1** **43** **MAY 04 2016**
9-89

Location

Loc Qty

Loc Code

WA003

4

121172

2

123128

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Thursday, September 24, 2015 2:10:28 PM

Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4463-9 Manufactured No

112 Each 3.0000 1 1

D4463-9

Tank Back

****B124752 → 1** DAS **43** MAY 04 2016
9-89

Location Loc Qty Loc Code

WA003 3

127752 3

D4463-11 Manufactured No

112 Each 4.0000 1 1

D4463-11

Tank Front

****B127699 → 1** DAS **43** MAY 04 2016
9-89

Location Loc Qty Loc Code

WA003 4

127699 2

128253 2

D4463-13 Manufactured No

190 Each 2.0000 1 1

D4463-13

Tank Bottom

****B129425 → 1** DAS **43** MAY 04 2016
9-89

Location Loc Qty Loc Code

WA003 2

129425 2

D4577-041 Manufactured No

190 Each 5.0000 1 1

D4577-041

Fwd Access Panel Assembly

Location Loc Qty Loc Code

ST234 5

106703 5

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																				
Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																				
Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																				
Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																				
Countersink ☐	Off-set ☐	Drawing ☐																																																																				
Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																				
Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																				
Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																				

Picklist Print

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Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

D4577-1	Manufactured	No	190	Each	2.0000	1	1
---------	--------------	----	-----	------	--------	---	---

D4577-1******

Rear Access Panel

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST233A	2	
124494	2	

D4577-3	Manufactured	No	190	Each	3.0000	1	1
---------	--------------	----	-----	------	--------	---	---

D4577-3******

Middle Access Panel

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST233A	2	
106697	1	
120991	1	
WA003	1	
128100	1	

D4968-1	Manufactured	No	190	Each	3.0000	1	1
---------	--------------	----	-----	------	--------	---	---

D4968-1******

Side Cushion

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST400	3	
110413	1	
120927	1	
133967	1	

D4975-1	Manufactured	No		Each	6.0000		1
---------	--------------	----	--	------	--------	--	---

D4975-1******

Bracket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA003	6	
120928	1	
128259	1	
135338	4	

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Shop Packet Print

Page 9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Page 10

Thursday, September 24, 2015 2:10:28 PM

Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

AN3-5A

Purchased

No

Each

254.0000

24

AN3-5A******

Bolt

LocationLoc QtyLoc Code

CA

130

m129682

130

GA

24

m131420

24

ST350

100

m133234

100

AN3H5A

Purchased

No

Each

42.0000

5

AN3H5A******

Bolt

LocationLoc QtyLoc Code

ST349

25

m132680

25

ST350

17

m127044

17

AN3-7A

Purchased

No

Each

125.0000

4

AN3-7A******

Bolt

LocationLoc QtyLoc Code

ST338a

50

m132763

50

ST349

75

131420

2

m132803

73

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Page 11

Thursday, September 24, 2015 2:10:28 PM

Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

MS20426AD4-4

Purchased

No

Each

3,092.000

4

MS20426AD4-4

Rivet

Location

Loc Qty

Loc Code

GA

62

125445

62

ST310

3030

m132536

3030

Each

970.0000

165

MS20470AD4-4

Purchased

No

MS20470AD4-4

Rivet, Universal Head

Location

Loc Qty

Loc Code

GA

477

M132536

168

M133077

309

ST310

493

118614

13

M132803

480

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
Root Cause				FAULT CATEGORY																					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																	
OTHER :																									

Picklist Print

Page 12

Thursday, September 24, 2015 2:10:28 PM

Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

190

Each

1,000.000

4

4

MS21042L3

Nut

Location

Loc Qty

Loc Code

FP001

334

M130922

334

GA

177

M131317

177

ST305

489

116549

12

126333

49

M128754

2

M132123

17

M132382

2

M132883

17

M132930

1

M133134

389

NAS1149D0332J

Purchased

No

190

Each

1,769.000

13

13

NAS1149D0332J

Washer

Location

Loc Qty

Loc Code

CA

14

m129682

14

GA

430

m132677

430

ST269

1325

m130325

900

m132677

425

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐									

Picklist Print

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Thursday, September 24, 2015 2:10:28 PM

Work Order ID: 137143

137143

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

190

Each

1,223.000

24

24

NAS1149D0363.J

Washer

Location

Loc Qty

Loc Code

CA

246

m130799

246

GA

248

m130799

248

ST269

729

m126319

7

m131618

1

m132317

10

m132677

50

m133031

661

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

ITEM	QTY -041	PART NUMBER	DESCRIPTION
	X	D4464-041	FUEL TANK ASSEMBLY
1	2	D3997-5	PLACARD (AUX FUEL DRAIN)
2	1	D3997-11	PLACARD (LOADING)
3	1	D3997-17	PLACARD (STOWAGE)
4	1	D3997-29	PLACARD (WARNING)
5	1	D3997-43	PLACARD (EARTH)
6	1	D3999-7	CORNER
7	1	D4000-1	FITTING
8	1	D4000-5	FUEL TANK VENT FITTING
9	3	D4000-9	GROMMET
10	1	D4000-045	FUEL PICK UP AND STRAINER ASSEMBLY
11	1	D4008-11	TANK HINGE HALF
12	1	D4008-041	FUEL FILLER SPLASH GUARD ASSEMBLY
13	1	D4023-3	FUEL CAP AND FLANGE
14	1	D4025-5	FUEL SENDER
15	3	D4057-1	RETAINER
16	1	D4062-041	TANK SUPPORT
17	1	D4125-1	FWD SEDIMENT BOWL
18	1	D4125-3	AFT SEDIMENT BOWL
19	2	D4404-5	CUSHION, FWD
20	1	D4462-1	BAFFLE
21	1	D4462-3	BAFFLE
22	1	D4463-041	TOP TANK ASSEMBLY
23	1	D4463-3	TANK AFT END
24	1	D4463-5	TANK UPPER CUT OUT
25	1	D4463-7	TANK FORWARD END
26	1	D4463-9	TANK BACK
27	1	D4463-11	TANK FRONT
28	1	D4463-13	TANK BOTTOM
29	1	D4577-041	FWD ACCESS PANEL ASSEMBLY
30	1	D4577-1	REAR ACCESS PANEL
31	1	D4577-3	MIDDLE ACCESS PANEL
32	1	D4968-1	CUSHION, SIDE
33	1	D4975-1	ANGLE BRACKET
34	24	AN3-5A	BOLT
35	5	AN3H5A	BOLT
36	4	AN3-7A	BOLT
37	4	MS20426AD4-4	RIVET, CSK
38	165	MS20470AD4-4	RIVET, PANHEAD
39	8	MS20470AD4-6	RIVET, PANHEAD
40	4	MS21042L3	NUT
41	13	NAS1149D0332J	WASHER
42	24	NAS1149D0363J	WASHER

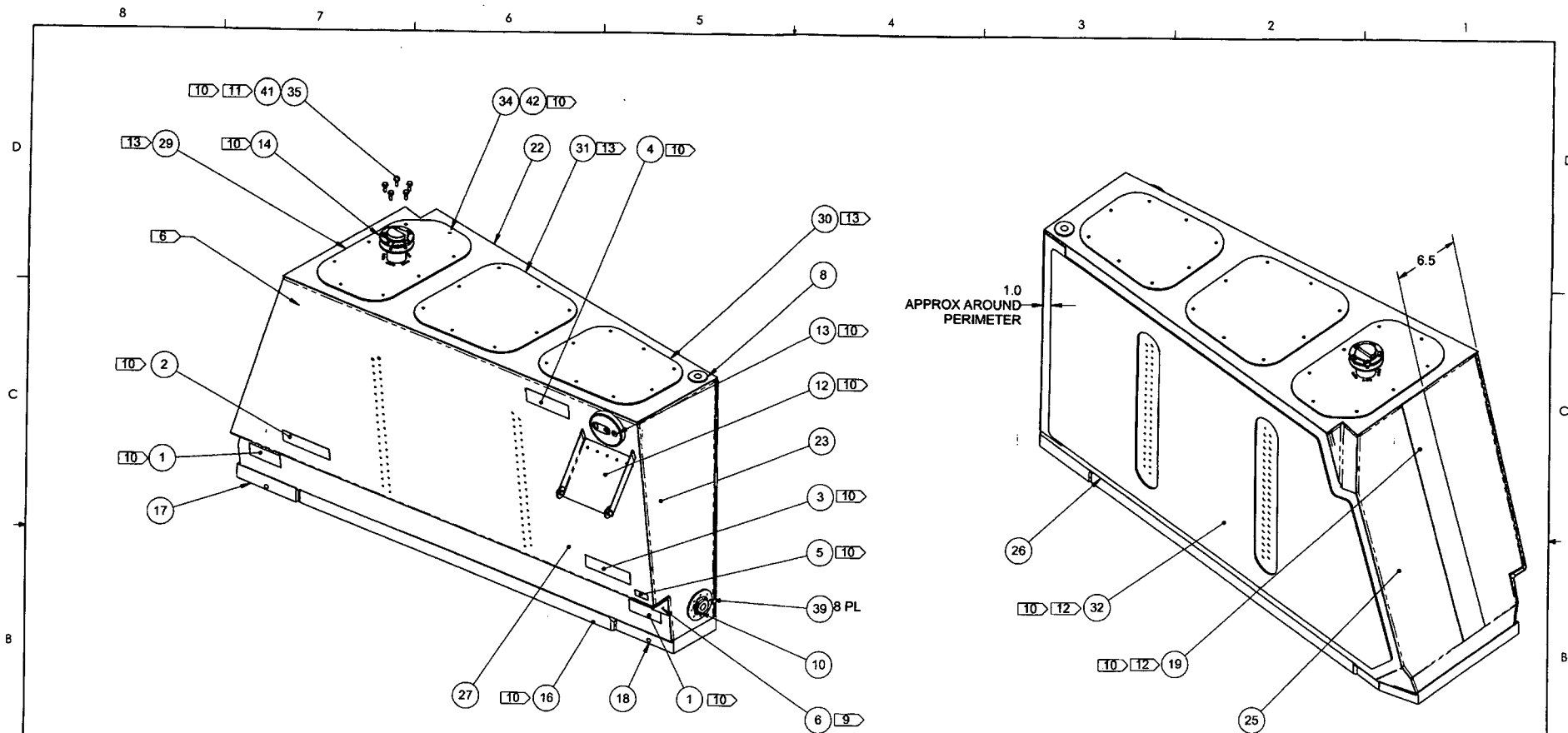
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER
NO. 137143 MLS
15-09-25

RELEASED
2015-06-18
ECN 15-583

H	REPLACED NOTE 8 (SHT 2), ADDED NOTE 14 (SHT 2), ADDED AUXILIARY VIEW (SHT 3), ADDED NOTE 15 (SHT 4), REPLACED NOTE 13 (SHT 5), SHT 4 WAS SHT 3, SHT 5 WAS SHT 4, REMOVED D4124-1 TABS & AN3-6A BOLTS, CHEMICAL CONVERSION COAT NOW AFTER WELDING (SHT 5), ADD AN3-7A BOLTS	CC	15.02.06
G	FINISH "FLAT GREY" WAS "GREY" (SHT 2); PICTORIAL UPDATE FOR D4000-1 & D4462-1	AP	14.12.05
F	AN3-5A WAS AN3C4A QTY. 24 (ZN D6-2) AN3H5A WAS AN3-5A QTY. 5 (ZN D7-2) MS20470AD4-6 WAS MS20426AD4-6 QTY. 8 (ZN B5-2) D4000-1 IS NO LONGER INSTALLED WITH COUNTERSUNK RIVETS UPDATE NOTE 10 ON SHEET 3	ML	14.06.27
E	UPDATED -041 WITH RE-DESIGNED D4463-3/-8/-11 AND D4462-1/-3 D4968-1 REPLACES D4404-5 ON TANK SIDE (ZN C3-2) REF NCR 13-3100 AN3-6A REPLACES MS35206-266 (ZN B8-2) NAS1149D0332J REPLACES 5 X NAS1149D0363J (ZN D7-2) REF PAR 12-217 D4975-1 REPLACES D3999-9 (ZN C3-2) REMOVED TAB D3999-11 AND MOVED D3997-43 PLACARD (ZN B6-5) UPDATED BILL OF MATERIALS REVISED ALL NOTES REMOVED SHEET 5	ML	14.05.13
D	ADDED NOTE RE HAND FORMING D4124-1, ZN A8-4.	DC	12.05.02
C	UPDATED -041 WITH RE-DESIGNED D4463-11/-13 REV. C PARTS, ZN B6-2, UPDATED -041 WITH RE-DESIGNED D4577-041/-3/-5 PARTS, ZN C6-2.	DC	12.03.27
B	UPDATED -041 WITH RE-DESIGNED PARTS, REMOVED D4463-13, ADDED D4577-041/-1/-5 ACCESS PANELS, ZN C6-2.	DC	11.12.14
A	NEW ISSUE, REF PAR11-117 & CAR 11-54.	DC	11.10.19
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4464 REV. H SHEET 1 OF 5 TITLE TANK ASSEMBLY SCALE NTS COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	CC		
CHECKED	AP		
MFG. APPR.	DD		
APPROVED	HS		
DE APPR.	DS	DATE 15.02.06	

APPROVED



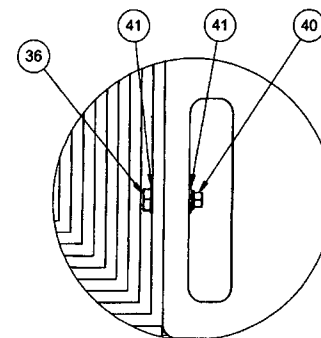
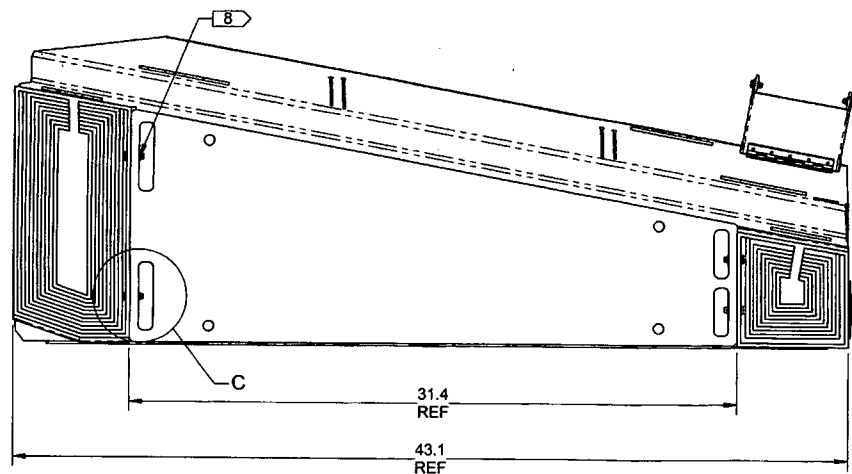
D4464-041 FUEL TANK ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2.1
PAINT FLAT GREY (4.2.2.3) PER DART QSI 005 4.2.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D350-794-141" USING D2729-1 RED DECAL
- 7) WEIGHT: 39.52 lbs
- 8) LPI AND PRESSURE TEST PER DART QSI 038 6.3
- 9) MASK PRIOR TO FINISH
- 10) INSTALL AFTER FINISH
- 11) LOCKWIRE BOLTS AFTER INSTALLATION PER AC 43.13 OR MS33540
- 12) INSTALL CUSHION USING CONTACT CEMENT. TRIM TO FIT IF REQUIRED
- 13) INSTALL D4577-041/-1/-3 ACCESS PANELS WET WITH PROSEAL P/S 890B.

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2015-06-18

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DRAWN	CC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. H
MFG. APPR.	DD	D4464	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
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DETAIL C
SCALE 3X

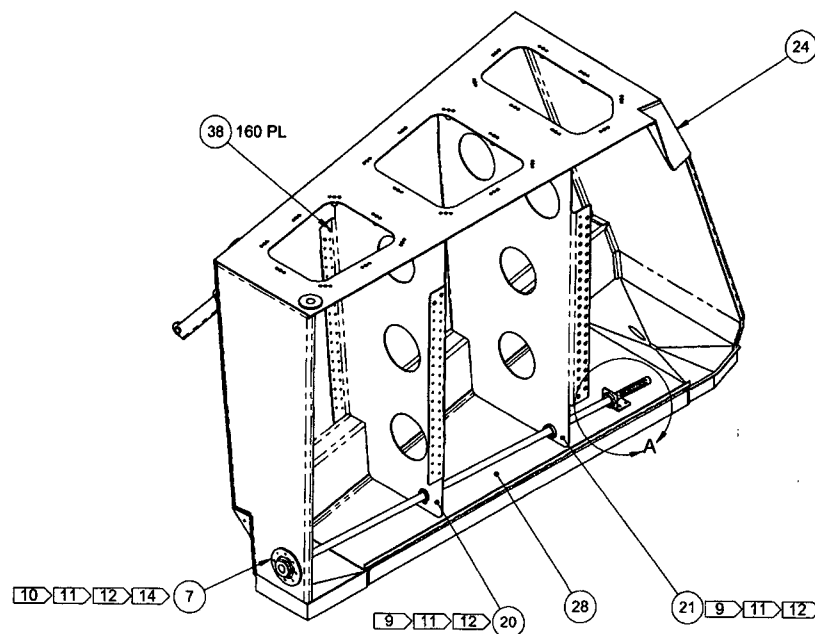
D4464-041 FUEL TANK ASSEMBLY
AUXILIARY VIEW

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) TRANSFER DRILL HOLES FROM D4125-1/3 SEDIMENT BOWLS TO D4062-041 TANK SUPPORT ASSEMBLY

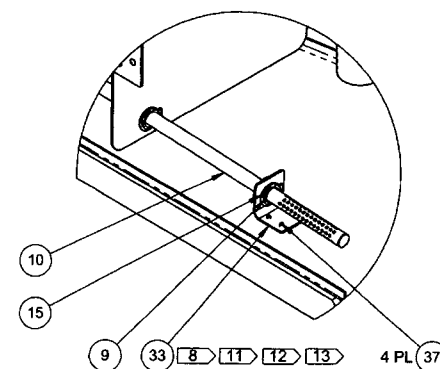
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D4464-041 FUEL TANK ASSEMBLY 
D4463-9 TANK BACK REMOVED
TO SHOW INTERIOR DETAIL



DETAIL A
ROTATED FOR CLARITY
SCALE 2X

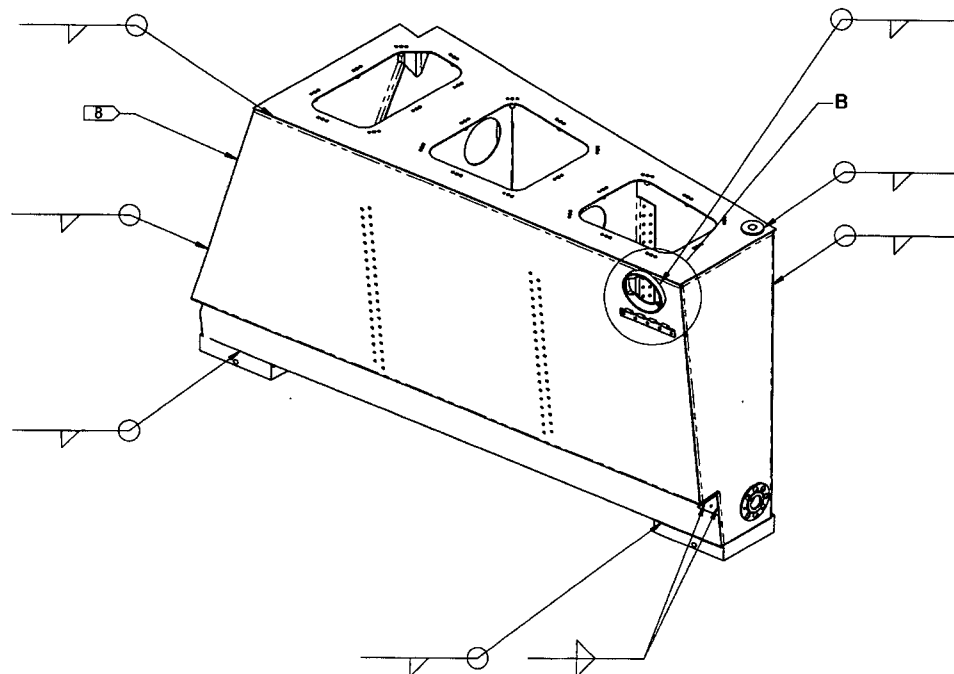
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) COAT FAYING SURFACES OF D4975-1 ANGLE BRACKET AND D4463-13 TANK BOTTOM WITH PROSEAL P/S 890B AND WET INSTALL MS20426AD4-4 RIVETS
- 9) COAT FAYING SURFACES OF D4462-1/-3 BAFFLES AND D4463-9/-11 TANK FRONT/BACK WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-4 RIVETS
- 10) COAT FAYING SURFACES OF D4000-1 FUEL SUPPLY FITTING AND D4463-3 TANK AFT END WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-6 RIVETS
- 11) FILLET SEAL THE INTERIOR OF THE TANK AROUND THE EDGE OF D4975-1 ANGLE BRACKET, D4462-1/-3 BAFFLES AND D4000-1 FUEL SUPPLY FITTING WITH PROSEAL P/S 890B
- 12) DOME SEAL ALL BUCKED ENDS OF RIVETS WITH PROSEAL P/S 890B
- 13) TRANSFER DRILL $\phi 0.128$ HOLES FROM D4975-1 ANGLE BRACKET INTO D4463-13 TANK BOTTOM AND COUNTERSINK HOLES $\phi 0.225 \times 100^\circ$ FROM THE OUTSIDE OF THE TANK
- 14) INSTALL D4000-1 FITTING WITH FLAT FACING UPWARDS
- 15) BRUSH PROSEAL 890A ON ALL INTERNAL SHEET METAL FOLDS

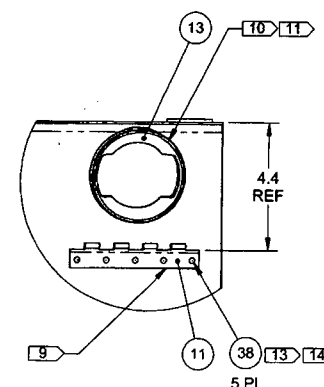
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R 2015-06-16 



D4464-041 FUEL TANK ASSEMBLY
WELDING AND RIVETING DETAIL



DETAIL B
ROTATED FOR CLARITY
SCALE 2X

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) TRIM FLANGES AS REQUIRED TO FIT ASSEMBLY
- 9) CENTER HINGE BELOW FUEL CAP FLANGE
- 10) POSITION FUEL CAP FLANGE AS SHOWN, ELONGATED HOLE APPROXIMATELY HORIZONTAL
- 11) POSITION FUEL CAP FLANGE SO THAT INNER FACE IS FLUSH WITH INSIDE OF TANK
- 12) WELD PER DART QSI 004
- 13) COAT FAYING SURFACES OF D4008-11 TANK HINGE HALF AND D4463-11 TANK FRONT WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-4 RIVETS
- 14) DOME SEAL ALL BUCKED ENDS OF RIVETS WITH PROSEAL P/S 890B

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